

Residents return as containment grows for Yosemite fire

Containment continued to grow on a wildfire burning for more than a week in Yosemite National Park and residents of the mountain community of Wawona have begun returning to their homes

By AP

Bakersfield Californian, Sunday, July 17, 2022

YOSEMITE NATIONAL PARK, Calif. (AP) — Containment continued to grow on a wildfire burning for more than a week in Yosemite National Park and residents of the mountain community of Wawona began returning to their homes on Sunday, officials said.

The Washburn fire was 51% contained after scorching 7.6 square miles (19 square km) of forest land, according to an incident update.

Residents and property owners can return to Wawona, but only with escorts during specific times, officials said. The area remains under a fire advisory.

The blaze began July 7 in Yosemite and is now burning into the Sierra National Forest. How the fire started remains under investigation but officials suspect people were the source.

Yosemite National Park visitors are prohibited from starting campfires or smoking in some areas to reduce the threat of sparking new wildfires, the National Park Service said Friday.

The famed Mariposa Grove, which includes more than 500 mature sequoias, escaped serious damage but the area remained closed to visitors.

Farther north, all evacuation orders and road closures were lifted Saturday for the Peter Fire in Shasta County. The California Department of Forestry and Fire Protection said that blaze destroyed 12 structures after erupting Thursday afternoon.

Yosemite Wildfire Moving East Into Sierra National Forest

By AP

GVWire, Thursday, July 14, 2022

A wildfire that threatened a grove of California's giant sequoias in Yosemite National Park was burning eastward into the Sierra National Forest on Wednesday.

The Washburn Fire is one of dozens of blazes chewing through drought-parched terrain in the Western U.S. It had increased in size to more than 6.6 square miles and was just 23% contained.

The fire will continue to grow over the next few days, according to a fire update Wednesday night.

"The combination of continued warm and dry weather conditions along with the heavy accumulation of large fuels is creating the perfect recipe for the very active fire behavior we are seeing," the update said.

Meanwhile, firefighting preparations had already been underway in the national forest.

"We've brought in Sierra National Forest folks from the get-go, kind of anticipating that this may happen," said Nancy Philippe, a fire information spokesperson.

Containment lines within the park, including along the edge of the grove, were holding, firefighting operations official Matt Ahearn said in a video briefing earlier in the day.

The fire had been entirely within the national park since breaking out July 7, when visitors to the Mariposa Grove of ancient sequoias reported smoke.

Authorities have not said how the fire started and whether it involved a crime or some type of accident.

Park Superintendent Cicely Muldoon told a community meeting this week that it was considered a "human-start fire" because there was no lightning that day.

Philippe said a park ranger who is a trained investigator was on the scene almost immediately when the fire was reported, and a law enforcement team continues to investigate.

Philippe said she believed they had found the point of ignition, but declined to release further information, citing the active investigation.

The fire in the southern portion of Yosemite forced evacuation of hundreds of visitors and residents from the small community of Wawona, but the rest of the park has remained open to summer crowds.

One firefighter suffered a heat injury and recovered, but no structures have been damaged.

Flames mostly skirted the Mariposa Grove, though it did leave its mark on some of the trees.

The Galen Clark tree, named for the park's first custodian, and three trees that greet visitors when they arrive at the popular destination, were partly charred but none were expected to die because their canopy didn't burn, said Garrett Dickman, a park forest ecologist who toured the site.

Dickman credited periodic intentional burns in the undergrowth beneath the towering trees with helping the grove survive its first wildfire in more than a century.

Small, targeted fires lit over the past 50 years essentially stopped the fire in its tracks when it hit the Mariposa Grove and allowed firefighters to stand their ground and set up sprinklers to further protect the world's largest trees, Dickman said.

"We've been preparing for the Washburn Fire for decades," said Dickman, who works for the park. "It really just died as soon as it hit the grove."

The sequoias are adapted to fire — and rely on it to survive. But more than a century of aggressive fire suppression has left forests choked with dense vegetation and downed timber that has provided fuel for massive wildfires that have grown more intense during an ongoing drought and exacerbated by climate change.

So-called prescribed burns — most recently conducted in the grove in 2018 — mimic low intensity fires that help sequoias by clearing out downed branches, flammable needles and smaller trees that could compete with them for light and water. The heat from fires also helps cones open up to spread their seeds.

While intentional burns have been conducted in sequoias since the 1960s, they are increasingly being seen as a necessity to save the massive trees. Once thought to be almost fireproof, up to 20% of all giant sequoias — native only in the Sierra Nevada range — have been killed in the past two years during intense wildfires.

Fighting fire with fire, which is used in limited applications to reduce threats to property or landmarks, is a risky endeavor and has occasionally gotten out of control.

In New Mexico, firefighters were working Tuesday to restore mountainsides turned to ash by the largest wildfire in the state's recorded history that broke out in early April when prescribed burns by the U.S. Forest Service escaped containment following missteps and miscalculations.

The Santa Fe County Commission in an afternoon meeting blasted federal officials and unanimously passed a resolution calling on the Forest Service to conduct a more comprehensive environmental review as it looks to reduce the threat of wildfire in the mountains that border the capital city.

So far in 2022, over 35,000 wildfires have burned nearly 4.7 million acres in the U.S., according to the National Interagency Fire Center, well above average for both wildfires and acres burned.

Do DIY air filters work against California wildfire smoke? What to know about cost and safety

By Vivienne Aguilar

In the Fresno Bee, Modesto Bee and other papers, Saturday, July 16, 2022

Do-it-yourself air filters are safe, effective and can be used to protect your lungs from California wildfire smoke.

Wildfire smoke is harmful and can stretch hundreds of miles. The smoke from the 2021 Dixie Fire in California was felt as far as Denver, The New York Times reported.

Here are two safe options, according to the University of California, Davis, the U.S. Environmental Protection Agency and the California Air Resources Board:

WHEN SHOULD I USE AN AIR FILTER?

Good air filters can remove dangerous smoke particles from your home. According to the California Air Resources Board, indoor air cleaners help filter out small particulate matter that can cause health concerns.

Wildfire smoke produces harmful air pollutants that can aggravate existing health problems and increase the risk of heart attack or stroke.

The resource board recommends using a certified air cleaner whenever the air quality index is at an unhealthy level, which you can check at [AirNow.gov](https://www.airnow.gov). The agency also says if a board-certified commercial system is not an option for your home, a DIY is an OK alternative.

“These temporary air cleaners should be used with extreme caution, and only if other air cleaning options are unavailable,” the board writes on its website.

It says never leave the device unattended and only use box fans manufactured in the last 10 years (after 2012), as those fans “will have a fused plug, which will prevent electrical fires if the device is knocked over.”

KINDS OF DIY AIR FILTERS

Option 1

The EPA has tested a version of the DIY air filter with one MERV-13 filter flat against a box fan.

The agency outsourced in 2021 for Underwriters Laboratories Inc. to conduct a study on safety. The company found that covering the front and back of a 20-inch box fan for seven hours “did not pose any observable fire hazards.” When only covering the suction side of a 20-inch box fan, the surface would get hot, but not enough to cause a superficial burn.

The California Air Resources Board writes you should “close all windows and doors when the box fan filter is being used” and “change the air filter when it gets dirty.”

Option 2

Another design, known as Corsi-Rosenthal Box, does not have the air filter directly placed on the fan, but incorporates multiple filters and a cardboard bottom to create a cube. University of California, Davis researchers Richard Corsi, Theresa Pistochini, and others found it to be effective enough to combat airborne particles during the COVID-19 pandemic.

The EPA also lists this method as a low-cost way to protect yourself against wildfire smoke.

If you try this option, Pistochini told The Bee you should use the safety directions attached to the model of box fan you use.

HOW TO BUILD YOUR OWN

The CR Box was “designed by experts but can be built by an amateur in under an hour,” NPR reported.

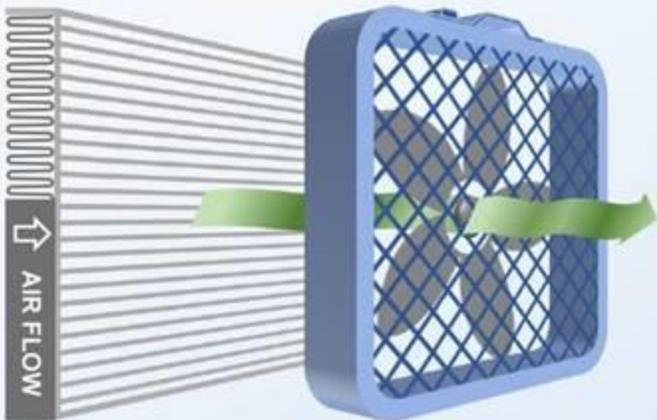
What you need for option 1, the filter fan, according to the EPA:

- 20-inch box fan
- MERV-13 or higher AC/Furnace filters
- Duct tape or bungee cord

At Walmart, for example, a box fan, filter and a roll of duct tape could cost roughly \$50.

DIY Air Cleaner to Reduce Wildfire Smoke Indoors

Materials



20" X 20" air filter
Suggested rating: **MERV 13**

20" X 20" box fan
Only use certified fans with UL or ETL marking (2012 model or newer)

Clamps or **Duct Tape** or **Bungee Cords**

Learn about box fan safety tips:
<https://www.epa.gov/air-research/research-diy-air-cleaners-reduce-wildfire-smoke-indoors#FAQ>

Assembly

1. Attach the air filter to the back of the box fan using either clamps, duct tape or bungee cords.
2. Check the filter for the direction of the air flow (marked on the side of the filter).
3. Replace filters when dirty.

A single filter do-it-yourself air purifier directions graphic. U.S. Environmental Protection Agency

Check for an arrow or indicator on the filter to ensure proper air flow. Attach the filter to the suction side of the fan, the EPA instructs.

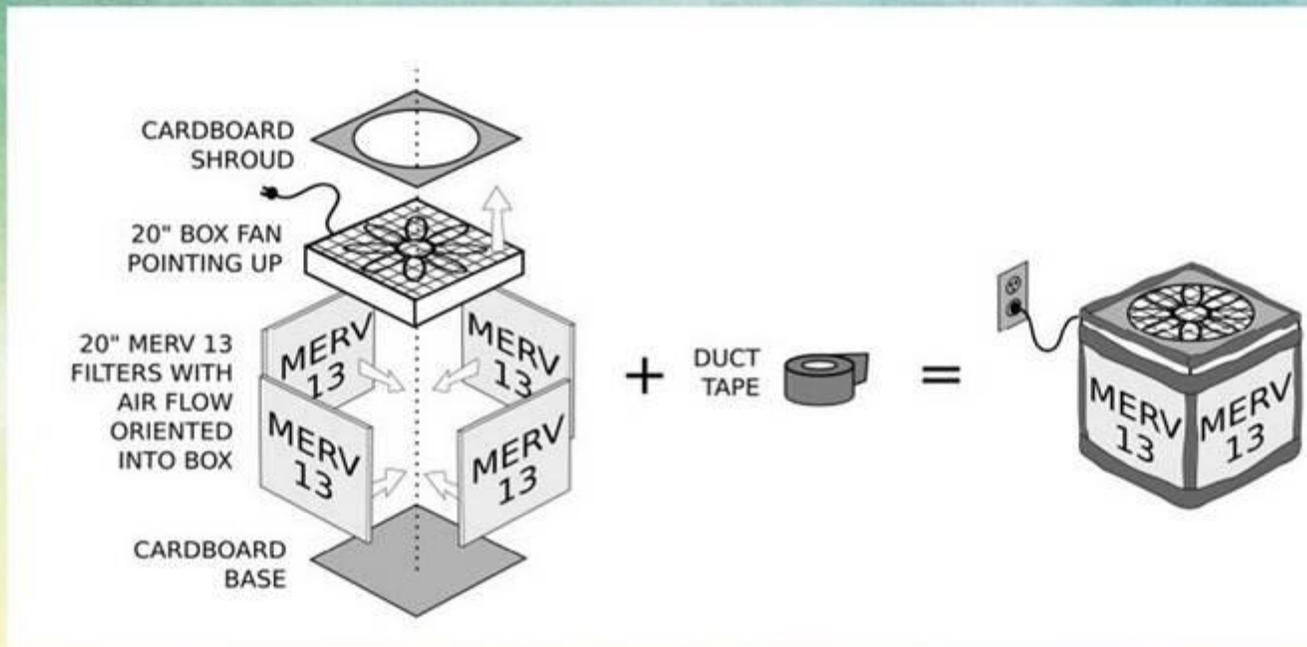
What you need for a CR box, according to the UC Davis study:

- Duct tape
- 20-inch box fan
- Two 20-by-20-inch pieces of cardboard
- Scissors or a box cutter
- 4 MERV-13 or higher AC/Furnace filters

According to the state of Kentucky's air quality division, its total cost is anywhere from \$70-100.

The EPA suggests buying new box fans if you intend to do this project.

Assembly diagram



Visual instructions on how to build a Corsi-Rosenthal air purifier box. *Kentucky Division of Air Quality*

Construct the shroud for the fan out of cardboard, only the blades of the fan should be visible. Attach a shroud to the box fan. Tape all sides of the box together.

You can find detailed assembly instructions from the Kentucky's Air Quality Division.

HOW MUCH DOES IT COST TO BUY AN AIR FILTER?

The filters recommended by the EPA and creators of the Corsi-Rosenthal Box specify to use (20x20x1) MERV13 or higher air filters, which cost around \$20 each at a hardware store. One or more of these materials are needed to build the DIY.

Home Depot: Elite Allergen Pleated MERV 13 Air Filter \$20.97

Walmart: MERV13 air filters from Filtrete Brand \$24.86

Amazon: Aerostar 20x20x1 MERV 13 Pleated Air Filter 4 pack \$42.99, \$10.75 per unit

Air resource board-certified filters, according to a UC Davis comparison of HEPA filters tested by UL, large-room models can range from \$99 for the Whirlpool Whispure WPT60P to \$899 for the ORANSI EJ120.

ARE DIY AIR FILTERS SAFE?

The EPA hazard findings for the use of a 20-inch box fan is comparable to the CR Box model. The fan in this model is not directly obstructed. Pistochini, with UC Davis, told The Bee the fan in a CR Box is more stable than the single filter option since the shape reduces the resistance and protects it from falling over.

She uses the model around her own children, and does not think it is any more dangerous than other electrical appliances found in the home, she said. The box is cost efficient and effective, but she and the EPA recommend people buy UL tested HEPA filters as a long-term solution. Underwriters Laboratories,

UL, is a OSHA-certified electrical testing facility that mitigates risk, injury, or danger, according to its website.

You should turn off the fan if it gets over heated or if you leave the house.

While HEPA filters are the more quality option for an air filter, using a MERV-13 furnace version will still collect particle concentrations, Corsi, Pistochini, and colleagues wrote in their report on the performance of the CR Box.